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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,893	11/30/2001	Lester D. Miller	25113A	4198

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OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,893

Applicant(s)

MILLER, LESTER D.

Examiner

Jeff H. Aftergut

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14-25 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12, 14-25 and 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) = .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-12 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venus-Gusmer Ships Turnkey Facility For Reinforced Plastic Trailer Panels (cited by applicant in IDS dated 11-3-03, hereinafter referred to simply as Venus-Gusmer) in view of any one of Weinstein et al, Finger, Elmore et al or Newbold, Jr.

At the outset, it should be noted that while no specific date was provided by applicant for the Venus-Gusmer article, it is believed that the reference was available as evidence that others practiced the disclosure therein at least as of September of 2000. This is because the Venus Products company was merged with Graves Spray Supply in September of 2000 to create Magnum Venus Products as expressed by the MVP Company History from the internet, copy provided to applicant (note that the article to Venus-Gusmer appears to be from Venus Products of Kent Washington and that the article presented by applicant failed to mention Magnum Venus Products as the supplier of the products). Note that this application was filed 11-30-2001 and thus the reference to Venus-Gusmer is believed to be available under 35 USC 102(b).

The reference to Venus-Gusmer taught the steps of a continuous mold surface being arranged in a longitudinal manner onto which fiber reinforced sheet may be formed which was provided by a plurality of molds which were fed side by side through the process line to manufacture the truck trailer panels. The reference taught that the mold surface was prepared

Art Unit: 1733

with either a wax coating or a Mylar film was applied to the mold to help release the part and to impart a glossy surface finish to the gelcoat. The mold was pulled under a reciprocator where a gelcoat was applied via a spray head, thereby providing the mold with a first outer coat onto the mold surface. The reference additionally suggested at least one dispensing mechanism to dispense resin over the first outer coat and at least one applicator for applying chopped fiber strands over the first coat. More specifically, the gel-coated mold was pulled under a chopper reciprocator where resin and catalyst as well as chopped fiber were applied to the gel-coated mold. Foam boards or plywood panels were then placed upon the wet laminate and a bond was formed between the same. Additional layers of chopped fiber and resin can be provided upon the core of plywood or foam. The assembly was then subjected to vacuum and air between the various layers are removed. Following vacuum application, the reference suggested that the mold was pulled through a curing oven in order to cure the material of the layers. The reference taught all of the essential steps of the claimed invention except it failed to teach that those skilled in the art would have incorporated a "roller mechanism" to roll the fiber strands and resin after the application of the same upon the mold.

However, in the art of molding and shaping with chopped fiber and resin it was well known to incorporate a roller mechanism to press out air and facilitate impregnation of the chopped fibers with the resin of the assembly as evidenced by any one of Weinstein et al, Finger, Elmore et al or Newbold, Jr. More specifically, the reference to Weinstein et al suggested that those skilled in the art would have incorporated a roller mechanism 38 in order to spread and squeegee the resin through the interstices of the fiberglass disposed on the form, see column 3, lines 45-48, in the manufacture of a panel for a truck. The reference to Finger suggested that

Art Unit: 1733

those skilled in the art would have subjected a chopped fiber mat with resin therein to the action of pressing rollers 38 and 39 in order to thoroughly wet the chopped fibers with resin in the process of making a panel molded from chopped fiber and resin, see column 3, lines 16-23. The reference to Elmore et al suggested that those skilled in the art at the time the invention was made to employ a roller device 40 to ensure that the chopped fibers become completely impregnated with the resin and to force out air from the assembly to prevent weak spots in the resin impregnated fiber reinforced material, see column 4, lines 30-39. The reference to Newbold, Jr. taught that it was known at the time the invention was made to employ a roller 14 to press out air from a resin and chopped fiber mixture in the manufacture of a plastic fiber reinforced container. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a roller mechanism to press out any residual air in a chopped fiber and resin layer of a molded laminate as well as to ensure proper resin impregnation for the layer as suggested by any one of Weinstein et al, Finger, Elmore et al or Newbold, Jr in the operation of making a panel for a truck employing reciprocators which deposit gelcoat and chopped fiber and resin in a mold in a continuous operation as suggested by Venus-Gusmer.

With respect to claim 2, the reference to Venus-Gusmer suggested that those skilled in the art would have incorporated a chopped in the assembly line. Regarding claims 3-6, note that it is unclear what applicant is claiming (as independent claim 33 does not have an "upper moveable surface", however the reference to Venus-Gusmer clearly incorporated a means to move the molds through the assembly and one skilled in the art would have readily understood that a conveying mechanism which included linkages would have been within the purview of the ordinary artisan for use in the operation as such conveying mechanism are known to the ordinary

Art Unit: 1733

artisan. Regarding claims 7 and 8, the applicant is advised that claim 33 does not include a drawing mechanism, however the use of a continuous loop double band belt to press and advance material along an assembly line was known per se in the art. Additionally, note that the reference to Venus-Gusmer clearly included a means to advance the molds along the process line.

Regarding claims 9-11, applicant is advised that the reference to Venus-Gusmer suggested that one skilled in the art would have incorporated a sheet material in the operation (Mylar) to feed the material through the operation. Regarding claim 12, note that the reference suggested that one skilled in the art would have incorporated a chopped to deposit the fiber on the mold.

Regarding claim 34, note that the reference to Venus-Gusmer described the continuous feeding of the molds in the longitudinal direction. Regarding claim 35, the reference to Venus-Gusmer suggested that one skilled in the art would have incorporated panels which were disposed onto the molds after the fiber and resin was applied to the mold. Regarding claim 36, note that the references to each of Weinstein et al, Finger, Elmore et al or Newbold, Jr suggested the use of a rolling mechanism to apply pressure to the assembly in order to drive out air and facilitate impregnation. One skilled in the art would have known how to apply the rolling pressure transversely in order to remove the air.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-12 and 14-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1733

In claim 2, lines 1-2, the language "said reinforcement applicator mechanism" lacks proper antecedent basis as no such applicator mechanism is defined in claim 33.

In claim 3, lines 1-2, the language "said upper movable surface" lacks proper antecedent basis as no such upper surface has been defined in claim 3.

In claim 7, line 1, "said drawing mechanism" lacks proper antecedent basis as no such drawing mechanism has been previously defined in claim 33.

In claim 8, line 1, "said sheet" lacks proper antecedent basis as no such sheet material has been previously defined in the claim or in claim 33.

In claim 14, line 3, the language "said longitudinal direction" appears which lacks proper antecedent basis. It is suggested that applicant define a longitudinal direction in claim 33 or 36.

Allowable Subject Matter

5. Claims 14-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

None of the prior art of record taught the specified roller mechanism used to roll along the chopped fiber and resin combination as recited in claim 14 wherein the roller was driven in a continuous loop in a direction transverse to the longitudinal direction.

Election/Restrictions

6. The response to the species restriction is noted. It is believed that claim 33 is a generic claim and that the inventions as defined in the dependent claims presented relate to the same generic invention (albeit different combination of the same apparatus). It is noted that the method

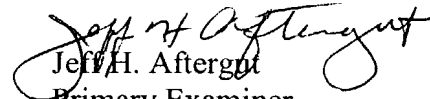
Art Unit: 1733

claims, directed to a different invention, have been cancelled and that applicant did not traverse this portion of the restriction requirement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
January 26, 2004